S/N unknown

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant:

SATOH et al.

Examiner:

unknown

Serial No.:

unknown

Group Art Unit:

unknown

Filed:

Concurrent herewith

Docket:

10873.1781USWO

Title:

SOLAR CELL

**CERTIFICATE UNDER 37 CFR 1.10:** 

"Express Mail" mailing label number: ED 977668250 US

Date of Deposit: OCTOBER 5, 2005

I hereby certify that this paper or fee is being deposited with the U.S. Postal Service "Express Mail Post Office to Addressee" service under 37 CFR 1.10 on the date indicated above and is addressed to Mail Stop PCT, Commissioner

for Patents, P.O. Box 1450, Arlington

Name: RALYNN WILHELM

## INFORMATION DISCLOSURE STATEMENT (37 C.F.R. § 1.97(c))

MS PCT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Dear Sir:

With regard to the above-identified application, the items of information listed on the enclosed Form 1449 are brought to the attention of the Examiner. The references were recently cited in an International Search Report, mailed July 6, 2004.

This statement should be considered because it is submitted within three months of the filing date of the above-identified application, which is not an application under 37 C.F.R. §1.53(d). Accordingly, no fee is due for consideration of the items listed on the enclosed Form 1449.

In accordance with 37 C.F.R. §1.98(a)(2), a copy of each non-U.S. document or other information listed on the enclosed Form 1449 is provided. A copy of the International Search Report is enclosed.

No representation is made that a reference is "prior art" within the meaning of 35 U.S.C. §§ 102 and 103 and Applicants reserve the right, pursuant to 37 C.F.R. § 1.131 or otherwise, to establish that the reference(s) are not "prior art." Moreover, Applicants do

not represent that a reference has been thoroughly reviewed or that any relevance of any portion of a reference is intended.

JC12 Rec'd PCT/PTC 0 5 0CT 2005

Consideration of the items listed is respectfully requested. Pursuant to the provisions of M.P.E.P. 609, it is requested that the Examiner return a copy of the attached Form 1449, marked as being considered and initialed by the Examiner, to the undersigned with the next official communication.

Respectfully submitted,

HAMRE, SCHUMANN, MUELLER & LARSON, P.C. P.O. Box 2902

Minneapolis, MN 55402-0902

(612) 455-3800

Bv:

Douglas P. Mueller

Reg. No. 30,300

Dated: October 5, 2005

DPM:nel

· A )

Date Mailed:

**OCTOBER 5, 2005** 

FORM 1449\*

INFORMATION DISCLOSURE STATEMENT

Docket Number: 10873.1781USWO

Application Number: UNIO 9 V 5 5 2 1 26

IN AN APPLICATION

(Use several sheets if necessary)

Applicant: SATOH et al.

Filing Date: concurrent herewith

Group Art Unit: UNKNOWN

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EXAMINER INITIAL	DOCUMENT NO.	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE	
	<u> </u>	FOR	EIGN PATENT DOCUM	1ENTS		1	
	DOCUMENT NO.	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	JP 9-213977	1997.8.15	JP			Abstract	
	JP 11-274526	1999.10.05	JP			Abstract	
							<u> </u>
						<u> </u>	
	1		S (Including Author, Title,				
		T. Dullweber et al., "A new approach to high-efficiency solar cells by band gap grading in Cu (In, Ga) Se <sub>2</sub> chalcopyrite semiconductors", Solar Energy Materials & Solar Cells 67 (2001) 145-150.					
	M. Con Structur 68-75.	M. Contreras et al., "High Efficiency Cu(In,Ga)Se <sub>2</sub> -Based Solar Cells: Processing of Novel Absorber Structures", First WCPEC (World Conference on Photovoltaic Energy Conversion); Dec. 5-9, 1994; Hawaii, pp. 68-75.					
		K. Kushiya et al., "Development of Polycrystalline CuIn <sub>x</sub> Ga <sub>1</sub> - <sub>x</sub> Se <sub>2</sub> Thin Film Solar Cells with Band Gap of 1.3 1.5 eV", Japanese Journal of Applied Physics, Part 1, No. 12A, Vol. 33 (1994) pp. 6599-6604.					
	1 1 -	T. Negami et al., "Production Techology for CIGS thing film solar cells", Thin Solid Films, 403-404 (2002) pp. 197-203.					
		T. Dullweber et al., "Study of the effect of gallium grading in Cu(In, Ga)Se2", Thin Solid Films, 361-362 (2000), pp. 478-481.					
		A. Dhingra et al., "Computer Simulation and Modeling of Graded Bandgap CuInSe <sub>2</sub> /CdS Based on Solar Cells", IEEE Transactions on Electron Devices, Vol. 43, No. 4, 1996, pp. 613-621.					
			Efficiency graded bandga d Solar Cells 41/42 (1996)		rystalline Cu (In,	Ga)Se <sub>2</sub> -based s	solar cells",

53148
PATENT TRADEMARK OFFICE

**EXAMINER** 

DATE CONSIDERED

EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form for next communication to the Applicant.